

Energy Conservation Guidelines

Disclaimer: These guidelines are not intended to be all-inclusive. They may be modified for local conditions. These guidelines supersede all previous instructions related to building management of energy usage guidelines. These Energy guidelines must be observed and implemented as outlined.

Objectives:

- Eliminate energy waste
- Ensure comfort for the students
- Ensure acceptable indoor air quality per industry standards

Responsibilities:

- Every person is expected to be an “energy saver” as well as an “energy consumer.”
- Each staff member is responsible for implementing the guidelines during the time that he/she is present in the classroom or office.
- The custodian is responsible for control of common areas, i.e. halls cafeteria, etc.
- Since the custodian is typically the last person to leave a building in the evening, he/she is responsible for verification of the night time shutdown.
- The principal/facility administrator is responsible for the total energy usage of his/her building.
- The Energy Specialist performs routine audits of all facilities and communicates the audit results to the appropriate personnel.
- The Energy Specialist is responsible for either directly or indirectly adjusting the District’s Energy Management System (EMS), including temperature settings and run times for Heating, Ventilation, and Air Conditioning (HVAC) and other controlled equipment.
- The Energy Specialist provides annual updates to the Board.
- The energy manager provides regular reports to principals indicating energy savings performance.

General Instructions

1. Conditioned classroom doors shall remain **closed** when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times when HVAC is operating.
2. All exhaust fans should be turned **off** during unoccupied hours.

3. All office machines (copy machines, laminating equipment, etc.) shall be switched **off** each night and during unoccupied times. Fax machines should remain on.
4. All computers should be turned **off** each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.
5. All capable PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.

Heating Equipment

1. Occupied temperature settings shall NOT be above 72° F
2. The unoccupied temperature setting shall be 55° F (i.e. setback). This may be adjusted to 60° F setting during extreme weather.
3. The unoccupied period begins when the students leave the area at the end of the school day. It is anticipated that the temperature of the classroom will be maintained long enough to afford comfort for the period the teacher remains in the classroom after the students have left.
4. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times. Hot water heating systems should be switched off using the appropriate loop pumps.
5. Ensure all domestic hot water systems are set no higher than 120 deg. F or 140 deg. F for cafeteria service (with dishwasher booster).
6. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.

Heating Season	Occupied Setpoints: * 68° F – 72° F Unoccupied Setpoints: 55° F- 60° F
Cooling Season	Occupied Setpoints: * 74° F – 78° F Unoccupied Setpoint: OFF

* Set Points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

Air Conditioning Equipment

1. Occupied temperature settings shall NOT be set below 74° F.
2. During unoccupied times, the air conditioning equipment shall be **off**. The unoccupied period begins when the students leave the area at the end of the school day. It is anticipated that the temperature of the classroom will be maintained long enough to afford comfort for the period the teacher remains in the classroom after the students have left.

3. Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
4. Ensure outside air dampers are closed during unoccupied times.
5. Air conditioning should not be utilized in classrooms during summer months unless the classrooms are being used for summer school or year –round school. Air conditioning may be used by exception only or in those schools that are involved in team-cleaning.
6. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air-conditioned classrooms or dining areas should be kept closed as much as possible.
7. Where cross-ventilation is available during periods of mild weather, shut down HVAC equipment and adjust temperature with windows and doors. Cross-ventilation is defined as having windows and/or doors to the outside on each side of a room.

Lighting

1. All unnecessary lighting in unoccupied areas will be turned **off**. Teachers should make certain that lights are turned off when leaving the classroom when empty. Utilize natural lighting where appropriate.
2. All outside lights shall be **off** during daylight hours.
3. Gym lights should not be left on unless the gym is being utilized.
4. All lights will be turned **off** when students and teachers leave school. Custodians will turn on lights only in the areas in which they are working.
5. Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

Water

1. Irrigation runtime schedules will be adjusted through the growing season to account for seasonal watering needs. (shorter early and late season cycles and longer cycles during the hotter times)
2. Sprinkler systems should be visually inspected once a month during daylight hours. Check and fix any tilted, clogged or broken heads.
3. Do not water during the heat of the day, typically between 10am-8pm.
4. When spray irrigating, ensure the water does not directly hit the building.
5. Consider installing water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges.
6. Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.